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Masculine Norms and Readiness for Change among Men in Substance Abuse Treatment

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I am submitting herewith a dissertation written by Renee Mikorski entitled "Masculine Norms and Readiness for Change among Men in Substance Abuse Treatment." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.

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Masculine Norms and Readiness for Change among Men in Substance Abuse Treatment

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ABSTRACT

The purpose of this study was to examine adherence to traditional masculine norms as they relate to readiness for change among 137 men in inpatient substance abuse treatment. We hypothesized that, when examined concurrently, the masculine norms of winning, emotional control, risk-taking, violence, power over women, playboy, self-reliance, primacy of work, and heterosexual self-presentation would each have significant, negative, and unique links to readiness for change. That is, the more men adhere to these masculine norms the more likely they would be at lower levels of readiness for change in substance abuse treatment and recovery. Results of the multiple regression analysis revealed that past treatment and adherence to the masculine norms of winning and self-reliance were uniquely related to more readiness for change; whereas, adherence to the masculine norm of power over women was uniquely related to less readiness for change. Our findings suggest that some masculine norms may be healthy for change while others may be harmful for change in a substance abuse population.

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CHAPTER ONE

INTRODUCTION AND GENERAL INFORMATION

Substance abuse in the United States is a national health concern, with 15.9% of individuals 12 years and older meeting criteria for a substance abuse disorder (National Center on Addiction and Substance Abuse at Columbia University, 2012). Gender role socialization has been implicated in differences found between men and women in entry and retention in substance abuse treatment programs (Isenhart, 2001; Iwamoto, Cheng, Lee, Takamatsu, & Gordon, 2011; Lemle & Mishkind, 1989; Peralta, 2007; Williams & Ricciardelli, 1999). Another important factor in substance abuse treatment outcomes is readiness for change, which is one's motivation to change substance abuse behaviors (Carey, Purnine, Maisto, & Carey, 1999; DiClemente, Schlundt, & Gemmell, 2004).

The purpose of this study was to examine adherence to traditional masculine norms as they relate to readiness for change among 137 men in inpatient substance abuse treatment using the Conformity to Masculine Norms Inventory-46 (CMNI; Parent & Moradi, 2009). We hypothesized that, when examined concurrently, the masculine norms of winning, emotional control, risk-taking, violence, power over women, playboy, self-reliance, primacy of work, and heterosexual self-presentation would each have significant, negative, and unique links to readiness for change. We found that past treatment and adherence to the masculine norms of winning and self-reliance were uniquely related to more readiness for change; whereas, adherence to the masculine norm of power over women was uniquely related to less readiness for change. Therefore, it is important for clinicians and others working with men in substance abuse treatment to consider how some masculine norms may be helpful and others may be harmful for changing one's substance abuse behaviors.

CHAPTER TWO

LITERATURE REVIEW

Substance abuse in the United States is a national health concern, with 15.9% of individuals 12 years and older meeting criteria for a substance abuse disorder (National Center on Addiction and Substance Abuse at Columbia University, 2012). In addition, substance abuse and addiction are found to be the largest contributing factor to preventable death in the United States (National Center on Addiction and Substance Abuse at Columbia University, 2012). Men, as compared to women, tend to abuse alcohol and drugs at higher rates and may have more negative outcomes due to their substance abuse (e.g., relationship issues, legal issues; Fillmore et al., 1997; Isenhart, 2001; Nolen-Hoeksema, 2004; Slutske, 2005). Adherence to traditional and restrictive notions of masculinity have been implicated in these gender differences. Scholars have suggested that some men may use alcohol and drugs to (a) conform to prescribed gender norms and prove their masculinity and (b) cope with their emotions and express them in a more socially acceptable way (Isenhart, 2001; Iwamoto, Cheng, Lee, Takamatsu, & Gordon, 2011; Lemle & Mishkind, 1989; Peralta, 2007; Williams & Ricciardelli, 1999). Supporting these notions, research has found significant positive relations between both conflict from restricted masculine gender roles (for reviews see, O'Neil, 2008, 2015) and conformity to traditional masculine norms (for a meta-analyses, see Wong, Ho, Wang, & Miller, 2017) and substance use and/or abuse among men.

Unfortunately, only a small percentage of people with substance abuse problems seek help (Cohen, Feinn, Arias, & Kranzler, 2007; National Institute on Drug Abuse, 2011). Although men and women are equally as likely to seek treatment for substance abuse (Brady & Ashley, 2005; Galdas, 2009; Galdas, Cheater, & Marshall, 2005), men have less favorable attitudes toward seeking psychological help than women (Gonzalez, Alegria, & Prihoda, 2005). In addition, adherence to traditional masculine gender norms is related to these less favorable attitudes (Wong et al., 2017) and conflict from restrictive masculine gender roles is related to negative views of counseling and psychotherapy (Rochlen, Land, & Wong, 2004). For those who do enter treatment, premature dropout rates are a major problem. For example, in a meta-analyses, Dutra et al. (2008) found that about one-third of participants dropped out before completing their substance abuse treatment. Rates like these are particularly troubling because length of stay in substance abuse treatment is one of the most consistent predictors of favorable outcomes (Simpson, 2004; Turner, Turner, Deane, & Deane, 2016). Furthermore, some studies demonstrate better substance abuse treatment outcomes for women than men (Greenfield et al, 2007).

An important predictor of both treatment retention and favorable recovery outcomes is readiness or motivation to change (Norcross, Krebs, & Prochaska, 2011; Simpson, 2004). However, scant research exists examining how traditional notions of masculinity may relate to readiness to change problematic substance abuse attitudes and behaviors. Thus, we extend previous research demonstrating the importance of masculinity in understanding men's substance misuse and attitudes about counseling and seeking psychological help by examining the relations between conformity to traditional masculine norms and readiness to change one's alcohol/drug use among men entering residential substance abuse treatment.

Substance Abuse and Readiness for Change

Readiness for change is one way to measure motivation for treatment and recovery from alcohol and drug abuse (Carey, Purnine, Maisto, & Carey, 1999; DiClemente, Schlundt, & Gemmell, 2004). As defined by DiClemente et al. (2004), readiness for change includes both the client's perceived importance of the issue in their lives as well as their confidence in their own ability to make these changes. Prochaska and DiClemente (1982) first outlined a transtheoretical model of change in their work with participants who were interested in smoking cessation. Through their research, five stages of change emerged which include pre-contemplation, contemplation, action, maintenance, and relapse.

Readiness for change begins with the pre-contemplation stage where clients do not believe they have a problem (DiClemente et al., 2004; van Wormer & Davis, 2008). Clients in this stage are often in denial about their issues, even in the face of legal, marital, work, or other consequences, which may indicate otherwise. Clients in this stage are not ready to make any changes because they are not willing to acknowledge that a problem exists (Prochaska, Redding, & Evers, 2013). Often times, these clients are categorized as being resistant in therapy and are not ready to make any type of change in their behavior in the next six months (Prochaska et al., 2013).

Clients in the contemplation stage are beginning to acknowledge the negative role that alcohol and/or drugs have played in their lives (DiClemente & Hughes, 1990). Clients at this stage may acknowledge that there is a problem but they may not know how to make changes or may feel ambivalent about doing so (van Wormer & Davis, 2008). Clients at this stage may seek out support from others but have not started to actively engage in treatment (Norcross et al., 2011). Clients can be stuck at this stage for extended periods of time because of their ambivalence about making changes (Prochaska et al., 2013).

Clients in the action stage have started to actively seek out treatment for their addiction (DiClemente & Hughes, 1990). These clients have started to make active changes in their alcohol and/or substance use including cutting down on use, attending Alcoholics Anonymous (AA) or Narcotics Anonymous (NA) meetings as well as being actively involved in a 30-day inpatient treatment program (van Wormer & Davis, 2008). These clients are actively trying to make changes in their lives that would lead them down the path of recovery (Norcross et al., 2011). Oftentimes, it is easier to recognize when clients are in the action stage because they are making concrete, observable, changes in their behavior, which can last from one day to six months (Norcross et al., 2011; Prochaska et al., 2013).

Lastly, when clients have made all necessary changes to improve their alcohol or drug use, they move into the maintenance stage (Norcross et al., 2011). During this stage, clients hope to maintain positive behaviors and strategies for controlling substance use that they have learned in the previous stages. Therefore, maintaining these positive behaviors is key to avoiding relapse (Prochaska et al., 2013; van Wormer & Davis, 2008).

There have been debates in the literature as to whether the five stages of change should be measured as discrete stages or as a continuous variable (DiClemente et al., 2004). Many of the measures used to examine stages of change (e.g. University of Rhode Island Change Assessment Inventory, URICA; McConnaughy, Prochaska, & Velicer, 1983; McConnaughy, DiClemente, Prochaska, & Velicer, 1989; Stages of Change, Readiness, and Treatment Eagerness Scale, SOCRATES; Miller & Tonigan, 1996) measure these stages in a discrete (rather than continuous) way, which assumes that individuals move through the stages in a clear-cut

sequential manner, which is not always the case (Prochaska, DiClemente, Velicer, & Rossi, 1992). In addition, the psychological processes that occur at each stage vary significantly so that it is hard to make equivalent comparisons between stages. For example, an individual at the pre-contemplation stage may be engaging in more cognitive processes of evaluating the pros and cons of changing their behavior while someone at the maintenance stage may be engaging in more behavioral strategies to maintain the changes they have made (DiClemente et al., 2004). Therefore, DiClemente et al. (2004) suggests that the stages of change be measured as a continuous variable in order to more accurately capture individual's readiness to change their substance abuse behaviors rather than assigning clients to a specific stage.

Client motivational readiness to change is one predictor of future substance use outcomes. For example, results from the Project MATCH study (a large scale, multisite, alcohol abuse treatment study) found that client readiness for change predicted post-treatment client drinking outcomes among outpatient clients (DiClemente et al., 2004; Project MATCH Research Group, 1997a, 1997b). That is, outpatient clients who were further along in their readiness for change were more likely to maintain their sobriety for longer periods of time (Project MATCH Research Group, 1997a, 1997b). Consistent with these earlier findings, Norcross et al.'s (2011) meta-analysis of 39 studies found significant, medium effect sizes for stage of change and client progress during treatment and psychotherapy outcomes. Interestingly, gender was found to moderate the results with effect sizes higher for studies including a larger number of female participants. Of the 14 studies that focused specifically on substance abuse, pretreatment readiness for change scores also predicted more favorable addiction-related outcomes. Research also shows that clients who are further along in their readiness for change are more likely to feel more efficacious in making behavior changes as well as maintaining a therapeutic alliance, which are both important in treatment (DiClemente et al., 2004). In addition, clinicians have found stage of change information important in therapy in order to tailor treatments to the client's needs in terms of their readiness for behavior change and using appropriate interventions such as motivational interviewing (DiClemente et al., 2004; Miller & Rollnick, 2002). A recent meta-analytic review supports the efficacy of stage matching treatments (Norcross et al., 2011). Taken together, these findings suggest the importance of readiness for change in substance treatment. Thus, examining predictors of readiness for change is important.

Previous research has found that clients who feel they have a problem and that their lives will improve through addressing the problem have greater readiness for change (Cox, Blount, Bair, & Hosier, 2000). In addition, Caviness et al. (2013) found that greater self-efficacy related to refusing marijuana use in high-risk situations and a history of quit attempts was related to higher levels readiness for change. Some evidence suggests that individuals who experience more consequences from their addiction (i.e., medical, employment, legal, family, psychological issues) are more likely to be ready to change their behavior (Natarajan, 2010; Pollini, O'Toole, Ford, & Bigelow, 2006). Particularly interesting to the current study, Pollini et al. (2006) found that female participants were more likely to be at a higher stage of readiness for change than men. This finding further emphasizes the need to examine gender-related factors that may influence client's readiness to change their substance abuse behavior. As such, we focus on masculine norms in this study.

Masculine Norms and Readiness for Change

Scholars advocating a gender socialization perspective posit that boys and men are taught to be masculine and to act like "boys" and "real men". In addition, they are often pressured to meet culturally prescribed ideals of masculinity or risk rejection by peers (Mahalik et al., 2003). From an early age, young boys are told by a variety of sources (e.g., family, friends, media) to restrict their emotions (i.e., "boys don't cry"), be tough, use violence to get what they want, and use women for sex without an emotional attachment (O'Neil, 2008). If boys and men do not adhere to these messages, they run the risk of being punished for their deviations. For example, men who are emotional tend to be called such names as "sissy" and "wimp" by others.

Taking this socialization perspective, scholars have explored adherence to these norms through the creation of the Conformity to Masculine Norms Scale (CMNI-46; Mahalik et al., 2003; Parent & Moradi, 2009). This popular scale measures different aspects of adherence to masculine norms, which include: winning, emotional control, risk-taking, violence, power over women, playboy, self-reliance, primacy of work, and heterosexual self-presentation.

To date, no study has examined the relationship between adherence to masculine norms and readiness for change among men in substance abuse treatment. One unpublished doctoral dissertation study (Fahey, 2004) examined the association between gender role conflict (GRC; O'Neil, Helms, Gable, David, & Wrightsman, 1986), a related but conceptually distinct construct from conformity to masculine norms, and readiness for change. Using a canonical correlation analysis, Fahey (2004) found that the four factors of gender role conflict (i.e., restricted emotionality; preoccupation with success, power, and competition; restricted affectionate behavior between men; and conflict between work and family relations) predicted greater ambivalence (i.e., less readiness) to change alcohol-abusing behaviors among male veterans hospitalized for substance abuse treatment. However, contrary to his hypothesis, he found no relation between the four factors of gender role conflict and two additional factors of readiness for change (i.e., problem recognition and taking steps to reduce or stop drinking).

Although no research to date has explored the connection between adherence to masculine norms using the CMNI-46 (or other existing masculine norm measures) and readiness for change, it makes sense for these two constructs to be theoretically related as outlined below. The winning subscale of the CMNI-46 taps into the masculine norm of valuing competition and winning at all costs (Parent & Moradi, 2009). This norm may be problematic for men who are entering treatment for substance use. In particular, men who score higher on this subscale may be more focused on winning and being "the best" rather than having realistic expectations for change in their treatment. They may be less willing to acknowledge faults and avoid vulnerability if they are trying to maintain this "winning" image of themselves. Iwamoto et al. (2011) found that men who scored higher on the winning subscale of the CMNI-46 were more likely to drink to intoxication than men who did not score as highly on this subscale. Therefore, this masculine norm in particular could be related to enjoyment of intoxication, which may make it less likely for these men to want to change their drinking and/or drug use habits.

The emotional control subscale of the CMNI-46 measures the need for men to maintain control over their emotions (Parent & Moradi, 2009). As in, men who score higher on this subscale are less likely to be willing to own up to vulnerable emotions or acknowledge that they are having these emotions. Men who enter substance abuse treatment programs are generally expected to engage in self-disclosure of emotions through individual, group, and family therapy as well as AA and NA meetings (in programs that adopt the 12-step model; Center for Substance

Abuse Treatment, 2005; National Center on Addiction and Substance Abuse at Columbia University, 2012; van Wormer & Davis, 2008; Yalom & Leszcz, 2005). In addition, self-disclosure of personal thoughts and emotions is integral to positive outcomes in group therapy (Yalom & Leszcz, 2005). Therefore, men who are less willing to identify and express their emotions may identify as being less ready to change their behaviors if that change involves emotional exploration and disclosure. Previous research has linked restrictive emotionality among men to less favorable views of counseling (Rochlen et al., 2004) and less willingness to seek counseling after viewing a videotape depicting an emotion-focused counseling session (Wisch, Mahalik, Hayes, & Nutt, 1995).

The risk-taking subscale of the CMNI-46 assesses the value placed on engaging in generally risky behaviors (Parent & Moradi, 2009). Men who abuse substances are more likely to find themselves in risky situations whether the situation is risky to their physical safety, reputation, relationships or legal record (Baskin-Sommers & Sommers, 2006; Centers for Disease Control and Prevention, 2016; Heath, Lanoye, & Maisto, 2012; Kiene, Barta, Tennen, & Armeli, 2009; Moore, Elkins, McNulty, Kivisto, & Handsel, 2011; Scott-Sheldon, Carey, & Carey, 2010). Therefore, men entering treatment who endorse these behaviors as being normative to the male experience may be more likely to be in the pre-contemplation stage due to the fact that they may not be ready or able to acknowledge that risky behaviors that coincide with, or are a result from, substance use are problematic and therefore they may be less likely to want to change their drinking or drug use. In addition, Iwamoto et al. (2011) found that men who scored higher on the risk-taking subscale of the CMNI-46 were more likely to drink to intoxication and to have an increased risk of alcohol-related problems.

The violence subscale of the CMNI-46 examines the endorsement of violence as normative, acceptable, and even necessary to solve problems (Parent & Moradi, 2009). Men who use violence to solve problems may be less likely or able to generate insight around new ways to solve problems. Therefore, they may be more likely to be in the pre-contemplation stage in which they do not acknowledge that they have a problem, especially in their propensity to use violence to solve problems (rather than more effective strategies such as introspection and reaching out to others).

Men who endorse the power over women items on the CMNI-46 tend to believe that men are superior to women and that women are meant to be controlled by men (Parent & Moradi, 2009). Higher scores on this subscale imply that these men attempt to control the women in their lives instead of engaging in meaningful and equitable relationships. This need for control may be manifested in other areas of their lives, including over their drinking behaviors, likely with little success. Many treatment programs use the 12-step model in which clients are expected to hand over their will (and control of their lives) to a higher power (National Center on Addiction and Substance Abuse at Columbia University, 2012; van Wormer & Davis, 2008). Therefore, men who score high on this subscale may be less willing to examine these problematic issues of control over women but also over their drinking and/or drug use behaviors.

The playboy subscale of the CMNI-46 examines the extent to which men desire multiple sexual partners without establishing an emotional connection (Parent & Moradi, 2009). Therefore, men who score higher on this subscale are likely to report valuing meaningless sexual activity with many partners. Men who endorse the playboy subscale may be less likely to be invested in making meaningful connections with others- whether in a romantic context or otherwise (Szymanski, Moffitt, & Carr, 2011). Therefore, it is likely that these individuals may struggle in a treatment context to make connections with their therapists and other clients in an

appropriate and meaningful way that could be conducive to their recovery. Iwamoto et al. (2011) found that men who scored higher on the playboy subscale were more likely to drink to intoxication and to experience more problems related to their alcohol use. In addition, Wong et al. (2017), using a meta-analysis, found that the playboy, along with power over women and self-reliance, were the best predictors of negative mental health outcomes and less favorable help-seeking attitudes among men.

Men who score high on the self-reliance subscale of the CMNI-46 believe in the masculine norm of relying on oneself rather than reaching out for help when needed (Parent & Moradi, 2009). As many treatment programs for substance abuse involve some sort of group therapy or community aspect (whether it be AA, NA, or another form of group support; Center for Substance Abuse Treatment, 2005; National Center on Addiction and Substance Abuse at Columbia University, 2012; van Wormer & Davis, 2008), it is important for men in treatment to become comfortable relying on others for help with their substance abuse issues. Therefore, men who enter treatment struggling to reach out for help when they need it may be less likely to admit that they have a problem and may be less willing or able to engage in effective treatment protocols. Iwamoto et al. (2011) found that men who endorsed this subscale were at increased risk for experiencing alcohol-related problems.

Men who score high on the primacy of work subscale of the CMNI-46 tend to prioritize work over all other commitments and responsibilities in their lives (Parent & Moradi, 2009). Men who score high on this subscale are likely to prioritize work over family, relationships, and their own physical and mental well-being (Parent & Moradi, 2009). Therefore, men who are concerned mainly with work commitments rather than focusing their energy on treatment and recovery may be less likely to be ready to change their alcohol and/or drug use. Therefore, it is likely that men who score higher on this subscale will be at a lower stage of readiness to change.

Lastly, the heterosexual self-presentation subscale of the CMNI-46 focuses on the presentation of oneself as straight and conforming to heterosexual, masculine norms (Parent & Moradi, 2009). Men who score high on this subscale are likely to have strong, negative reactions to others assuming they may be gay and may engage in behaviors to avoid being perceived as non-heterosexual. As stated earlier, many treatment programs in substance abuse involve self-disclosure of one's emotions, often to a group of one's male peers (Center for Substance Abuse Treatment, 2005; National Center on Addiction and Substance Abuse at Columbia University, 2012). If men entering treatment are confronted with this reality of knowing that they will be expected to be emotionally intimate with other men, this may invoke some fears of being perceived as gay. Therefore, those men who score higher on the heterosexual self-presentation subscale may be less likely to be ready to engage in treatment protocols that are necessary for recovery, putting them at lower levels of readiness for change.

Overall, it seems that men who endorse higher scores on conformity to masculine norms may be less likely to change their attitudes and behaviors related to their substance use. In particular, as many treatment centers for substance use focus on community building and emotional connections with other men, it is likely that those men who score higher on particular subscales (such as emotional control, self-reliance, and heterosexual self-presentation) may be at a lower level of readiness to change and less likely to engage in treatment. Therefore, it is important to examine this relationship between masculine norms and readiness for change for those men entering treatment for substance use as previous research has shown a connection between level of readiness for change and substance use outcomes in the future (DiClemente et al., 2004; Norcross et al., 2011).

The purpose of this study was to examine adherence to masculine norms as they relate to readiness for change among men in inpatient substance abuse treatment. We hypothesized that, when examined concurrently, the masculine norms of winning, emotional control, risk-taking, violence, power over women, playboy, self-reliance, primacy of work, and heterosexual self-presentation would each have significant, negative, and unique links to readiness for change. That is, the more men adhere to these masculine norms the more likely they would be at lower levels of readiness for change for substance abuse treatment and recovery. Because previous treatment for substance abuse has been associated with more readiness for change (Caviness et al., 2013; Claus, Mannen, & Schicht, 1999), we included past treatment as a covariate in our analyses.

CHAPTER THREE

MATERIALS AND METHODS

Participants

Participants were recruited from an inpatient Southeastern substance abuse treatment center. An a-priori power analysis using G*Power 3.1 (Faul, Erdfelder, Lang, & Buchner, 2007) for linear multiple regression-fixed model, R deviation from zero with 10 predictor variables, expected medium effect size (.15), and 80% power revealed that a minimum of 118 participants would be needed.

The initial sample consisted of 150 men who completed the survey. We eliminated eight participants who left more than 20% of the items missing on one or more measure, one participant who did not fill out the past treatment item, one participant who was assigned female at birth, one participant was assigned intersex at birth, and two participants who did not specify their sex assigned at birth. This resulted in a final sample of 137 participants. All participants had a DSM-5 diagnosis of substance use disorder.

Of the 137 participants surveyed, 87% identified as Caucasian/White/European, 6% identified as African American/ Black, 1% identified as Asian/Asian American/ Pacific Islander, 2% identified as Hispanic/Latino, 2% identified as Native American/American Indian, 2% identified as biracial/multiracial, and 1% identified as Other. Ages of participants ranged from 19 to 76 with a mean age of 39.33 years (SD = 11.72). In terms of sexual orientation, 96% of participants identified as heterosexual, 4% identified as gay, and 1% identified as bisexual. All participants identified their gender identity as male/man. Of the participants surveyed, 3% attained less than a high school diploma, 40% a high school diploma, 23% a 2-year college degree, 24% a 4-year college degree, and 10% a graduate or professional degree. Just over half (55%) of participants reported receiving previous treatment for substance abuse. Due to rounding, not all percentages add up to 100%.

Measures

Masculine norms. The Conformity to Masculine Norms Inventory-46 (CMNI-46; Mahalik et al., 2003; Parent & Moradi, 2009) was used to assess conformity to masculine norms. The CMNI-46 was developed from the original 94-item CMNI (Mahalik et al., 2003) in order to create a more streamlined version of the measure (Parent & Moradi, 2009; Parent & Moradi, 2011). This scale consists of 46 items assessing conformity to masculine norms along nine dimensions: winning (6 items, e.g., “In general I would do anything to win”); emotional control (6 items, e.g., “I never share my feelings”); risk-taking (5 items, e.g., “I enjoy taking risks”); violence (6 items, e.g., “Sometimes violent action is necessary”); power over women (4 items, e.g., “In general, I control the women in my life”); playboy (4 items, e.g., “If I could I would frequently change sexual partners”); self-reliance (5 items, e.g., “I hate asking for help”); primacy of work (4 items, e.g., “My work is the most important part of my life”) and heterosexual self-presentation (6 items, e.g., “I would be furious if someone thought I was gay”). Each item is rated on a 4-point Likert type scale from 1 (*strongly disagree)* to 4 (*strongly agree*). Mean subscale scores are calculated, with higher scores indicating more endorsement of each masculine norm.

Structural validity of scores on the CMNI-46 was supported via confirmatory factor analysis (Parent & Moradi, 2009). Convergent validity of the CMNI-46 was supported by its positive correlations with two other measures of masculinity and traditional attitudes towards marital roles. Discriminant validity was supported by non-significant relations with positive impression management, with the exception of playboy subscale scores. Finally, Parent and Moradi (2011) reported subscale internal consistency reliabilities ranging from .78 to .89. Cronbach's alpha for scores on the subscales for the current study were: winning (α = .81), emotional control (α = .87), risk- taking (α = .80), violence (α = .79), power over women (α = .79), playboy (α = .79), self-reliance (α = .83), primacy of work (α = .77), and heterosexual self-presentation (α = .88).

Readiness for change. The University of Rhode Island Change Assessment (URICA; McConnaughy et al., 1983; McConnaughy et al., 1989) assesses attitudes, intentions and behaviors associated with changing a target behavior. The target behavior for this study was an alcohol/drug problem. The URICA consists of 28 items and assesses readiness for change using four subscales (with 7 items each) that map onto the stages of change: Pre-contemplation (e.g., "As far as I'm concerned, I don't have any alcohol/drug problems that need changing"), Contemplation (e.g., "I think I might be ready for some self-improvement"), Action (e.g., "I am doing something about the alcohol/drug problems that had been bothering me"), and Maintenance (e.g., "I have been successful in working on my alcohol/drug problem but I'm not sure if I can keep up the effort on my own"). Participants rate each statement on a 5-point Likert-type scale from 1 (*strong disagreement)* to 5 (*strong agreement)*. Following DiClemente et al.'s (2004) recommendation, we used the continuous readiness for change score by using the following URICA-subscale algorithm: Contemplation subscale mean + Action subscale mean + Maintenance subscale mean – Pre-contemplation subscale mean (possible range = -2 to +14).

The URICA is one of the most widely used readiness for change measures in in the substance abuse literature (DiClemente et al., 2004; Norcross et al., 2011). Validity of the URICA has been supported through factor analysis (McConnaughy et al., 1983, 1989) and cluster analyses indicating that the stages are associated with different behavioral profiles (e.g., El-Bassel et al., 1998; McConnaughy et al., 1983, 1989). Pretreatment readiness for change scores using the URICA also predicted more favorable addiction-related outcomes (Norcross et al., 2011). Napper et al. (2008) provided additional evidence for convergent and discriminant validity by examining the URICA's relations with two other readiness for change measures and demonstrating that stages of change were distinct from one another. In the current study, Cronbach's alphas for the four subscales were: pre-contemplation (α = .77), contemplation (α = .74), action (α = .78), and maintenance (α = .82).

Procedure

Men who entered the residential treatment program for treatment of their substance use were informed about the opportunity to participate in a research study examining attitudes and behaviors related to their alcohol/drug use and being a man. Potential participants were told that participation in the present study was completely voluntary and would not affect their substance use treatment in any way. Men who were willing to participate in the present study were provided with a packet that contained the informed consent, paper-and-pencil survey, and an envelope. Upon completion of the survey, participants placed all of the documents back into the

envelope provided and dropped the materials off in the assessment office of the treatment facility. The researchers from the university periodically picked up completed surveys from the treatment facility. Participants received a dollar paper-clipped to the packet as an incentive to participate. All study procedures were approved by the Institutional Review Board at our university in order to ensure the safety of all participants.

CHAPTER FOUR

RESULTS AND DISCUSSION

Results

Missing data for the 137 participants included in the study revealed that less than 1% of all data for individual items were missing and 88.32% of participants had no missing data. The maximum percentage of missing values for any given scale item was 2.9%. Because of the low level of missing data, we used available item analysis to calculate scale means, standard deviations, and Cronbach's alphas (Parent, 2013).

Means, standard deviations, and inter-correlations among all variables assessed in this study are shown in Table 1. To examine our hypothesis, we conducted a hierarchical multiple regression analysis predicting overall readiness for change scores. We entered past treatment (coded 1 = no, 2 = yes) as a control variable in Step 1. In Step 2, we entered the nine masculine norms subscales of the CMNI-46. In order to ensure that the predictor variables were sufficiently independent for regression analyses, an analysis of multicollinearity was performed and results indicated that multicollinearity was not a problem. Variance inflation factor (VIF) were well below 10 (highest VIF = 1.56) and condition indexes were < 30 (highest condition index = 18.16; Field, 2013; Tabachnick & Fidell, 2001). Absolute values for skewness (.07 - 1.25) and kurtosis (.06 – 2.39) for variables in the regression model fell within the acceptable range of skewness < 3 and kurtosis < 10 (Weston & Gore, 2006). One multivariate outlier was observed (Mahalanobis distance p <.001) but it did not have a significant bearing on the overall model, with a Cook's distance well below 1, so we retained it (Field, 2013).

The results of the regression analysis were significant at p = .001; R^2 = .21, F (9, 126) = 3.44. When examined concurrently, only past treatment (β = .30) and the masculine norms of winning (β = .17), power over women (β = -.21), and self-reliance (β = .30) predicted readiness for change. The masculine norms of emotional control, risk-taking, violence, playboy, primacy of work, and heterosexual self-presentation did not significantly predict readiness for change in this sample.

Discussion

Substance abuse is a major public health issue in the United States (National Center on Addiction and Substance Abuse at Columbia University, 2012). In order to improve treatment outcomes, it is important to examine factors which may influence individuals' likelihood to change their substance use behaviors (Caviness et al., 2013; Cox et al., 2000; Natarajan, 2010; Pollini et al., 2006). In this study, we examined masculine norms as a factor which may influence readiness to change in a substance abuse population and found that previous treatment as well as the masculine norms of winning, power over women, and self-reliance significantly predicted participants' readiness to change their substance abuse behaviors.

Although previous research has shown that adherence to masculine norms may have a negative effect on substance abuse and other behaviors (Iwamoto et al., 2011; O' Neil, 2008; Wong et al., 2017), the findings from this study suggest that adherence to masculine norms may not always have a detrimental effect on men struggling with substance abuse issues. Specifically, the masculine norms of winning and self-reliance positively predicted greater readiness for change. As in, participants who more greatly endorsed these norms were more ready to change

their substance abuse behaviors. Therefore, stronger adherence to masculine norms may not always mean that men will be less likely to change their substance use.

The masculine norm of winning measures the value of competition with others and being the best at all costs (Parent & Moradi, 2009). Although we initially predicted that this norm would negatively predict readiness for change due to a potential for men competing with other men in treatment (rather than focusing on their own change) the results show that endorsing the winning norm was positively related to readiness to change substance abuse behaviors. This is consistent with a longitudinal study that found that men's adherence to the winning norm was related to prospective well-being (Kaya, Iwamoto, Brady, Clinton, & Grivel, 2018). Therefore, it is possible that instead of wanting to maintain a winning image of themselves as initially predicted, that men endorsing this norm may want to "win" at treatment. Therefore, valuing competition could actually be a motivating factor for men to want to change their substance abuse behaviors and improve their lives rather than as a way to compete with others. Winning could be a helpful norm for clinicians to explore with men in treatment to encourage them to tackle treatment as they would other problems in their lives and focus on competing with themselves (to be the best version of themselves) to make improvements. Therefore, clinicians may use a solution-focused intervention with specific goals for the client to achieve in order to target this norm of winning. Although previous research has shown that men who endorse the "winning" norm are more likely to drink to intoxication (Iwamoto et al., 2011), the internalization of this norm may actually be beneficial for men entering substance abuse treatment.

Likewise, contrary to our predictions, the masculine norm of self-reliance positively predicted readiness to change substance abuse behaviors. The self-reliance subscale measures independence and not asking for help from others (Parent & Moradi, 2009) and in previous research has been found to be associated with greater alcohol-related problems (Iwamoto et al., 2011). However, in our sample, men who scored higher on self-reliance were more likely to be ready to change their substance abuse behaviors. This makes sense in terms of men feeling independently ready to make changes rather than relying on others to help make those changes. Specifically, the readiness for change measure that was used in this study examines how participants as individuals may be ready to make changes on their own (with little mention of treatment or reaching out to others for help). Therefore, it would make sense that participants who endorsed higher levels of self-reliance would be more likely to endorse readiness to change substance abuse behaviors on their own (rather than seeking help in order to make change happen). Future research may examine how these scores may change in participants over time as they move through a treatment program in which they are expected to rely on others in group settings and AA/NA meetings. However, self-reliance is another masculine norm that could be supported and utilized by clinicians in treatment to support men's motivation for change by reinforcing the men's accountability for their own actions and relying on themselves to make change.

The masculine norm that negatively predicted readiness for change in this sample was power over women. The power over women subscale includes items that target men's beliefs about women's place in society and specifically the belief that women should be controlled by men (Parent & Moradi, 2009). Previous research suggests the power over women subscale is consistently related to negative mental health outcomes such as depression and substance use as well as more negative attitudes towards seeking professional psychological help (Wong et al., 2017). We found that men who endorsed these beliefs more strongly were less likely to be ready

to change their substance abuse behaviors and suggests that sexism also hurts men. This could be due to the fact that this subscale measures how men feel others should be behaving (specifically, woman) and is less targeted on one's own behaviors. Therefore, men who endorse this subscale more strongly could also hold onto the belief that others (rather than themselves) are to blame for their problems. If this is the case, men endorsing this subscale could be blaming others in their lives for their problems rather than taking accountability for making changes to their substance use behaviors. Therefore, clinicians may want to target men holding sexist beliefs in treatment in order to challenge them to take accountability for their own actions.

While not part of the main hypotheses for this study, having been in previous treatment significantly predicted readiness for change in this sample. As noted in prior research, previous experience in treatment is a factor that often predicts readiness for change in future treatment settings (Claus, Mannen, & Schicht, 1999). This can be explained by the fact that clients who have gone through treatment previously may have had the opportunity to examine any ambivalence about their substance abuse and increase motivation for change through this previous treatment as well as experiences of relapse (Claus et al., 1999). Therefore, our research confirms previous findings that this is an important factor to examine as significantly related to readiness for change.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

Although there are several strengths to this study including the utilization of a clinical sample from an inpatient treatment center, as well as examining nine different facets of masculinity and masculine norms, there are several limitations that should be noted. First, the study is correlational and therefore causation cannot be implied from the findings. Therefore, although some findings were significant, it is important to realize that a causative relationship between masculine norms and readiness for change cannot be extrapolated from the findings. Future research may take a longitudinal approach by examining winning, self-reliance, and power over women as predictors of dropout rates and readiness for change over time as men progress through treatment. In addition, it would be interesting for future research to explore whether creating a targeted intervention for certain aspects of masculine norms (highlighting helpful norms while challenging unhelpful ones) may lead to higher levels of readiness for change and reduced substance use.

Second, the participants were recruited from an inpatient substance abuse treatment center in the Southeastern United States and were mostly White and heterosexual. Because of these factors, the findings may not generalize to non-White, non-heterosexual populations. Many participants entering the treatment center came from rural areas (both inside and outside of the Southeast), it is possible that some of the cultural values these men (e.g., self-reliance; Mohatt, Adams, Bradley, & Morris, 2006) hold overlap with the masculine norms measured in this study. In addition, the facility where participants were recruited is a privately-owned institution where clients need insurance to enroll in services, excluding potential participants who could not afford this type of treatment. Therefore, it is important in future research to examine masculine norms and the relationship to readiness for change in varying demographic populations in different geographic areas. In addition, some research suggests that the CMNI-46 is less consistent in populations of men of color (Hsu & Iwamoto, 2014) and so using more culturally appropriate measures (if available) is warranted.

Lastly, participants were recruited while they were in the detox portion of the treatment program. Being in detox (rather than in the residential portion of the program) could have influenced their readiness to change in either direction. As detox can be characterized by a lot of free time and boredom for patients in substance abuse treatment, this could have made some participants less likely to want to change their behaviors if they believed that the rest of treatment would be similar. However, some participants may also have been more ready to change as they had taken the first time in making changes by entering into the treatment center and were looking forward to getting started on the residential program. Therefore, their enthusiasm for change could have been greater at the beginning of the treatment process. Future research should examine readiness for change at multiple time points in treatment to examine whether masculine norms predict greater readiness for change across time. As many patients entering treatment tend to fluctuate in their readiness for change over time (Rice, Hagler, & Tonigan, 2014), it would be helpful to examine how endorsing certain masculine norms at the beginning of treatment could potentially influence treatment outcomes over time.

This study adds to the growing literature examining adherence to masculine norms and factors that influence mental health outcomes for men (Wong et al., 2017). We found that not all masculine norms examined in this study predicted a negative association with readiness to

change substance abuse behaviors. Although previous research has touted adherence to masculine norms as inherently negative (O'Neil, 2008; Wong et al., 2017), it is important to consider a more flexible approach to studying these norms. Based on our findings, it appears that some masculine norms may be helpful in terms of increasing men's readiness to change their substance abuse behaviors. Specifically, clinicians working with men in substance abuse treatment centers (or other settings) may frame the masculine norms of winning and self-reliance as areas of strength in which clients may use to their advantage in treatment. Clinicians may empower men to use these qualities effectively in treatment to motivate them to make changes to their substance abuse behaviors.

On the other hand, it is also important for clinicians to be aware of how the masculine norm of power over women could be detrimental to men's progress in substance abuse treatment. Therefore, it would be helpful for clinicians to challenge sexist beliefs and/or negative attitudes about women that these clients may bring into the therapy room in order to potentially facilitate greater readiness to change. Clinicians might incorporate these challenges into examining beliefs about gender that male clients may have internalized from a young age. Challenging these beliefs could allow for more flexibility for growth for these clients in terms of their substance abuse behaviors. Feminist therapy and motivational interviewing techniques could potentially work well in tandem when targeting these clients.

In terms of advocacy, our findings suggest that gender and gender role socialization processes are important variables in substance abuse treatment. Outreach programming and prevention work is needed to increase men's awareness of the potential negative (and positive) effects that traditional masculine norms may have on both substance misuse and efforts to reduce or eliminate such misuse. In addition, it is important to advocate for addiction recovery programs specifically designed to target these gender issues.

The results from this study also have important implications for education and training in mental health and substance abuse treatment. As masculine norms appear to play a role in readiness for change of substance abuse behaviors, it is important to include feminist and gender-based research and interventions in the training mental health professionals. This can help clinicians to be able to identify when, how, and in what direction masculine norms may be influencing their clients' readiness to change. It can also aid in the development of gender sensitive case conceptualizations and treatment plans.

Overall, this study adds to the literature on masculine norms and substance abuse and has important implications for clinicians working with these populations. Our findings suggest that some masculine norms (i.e., winning, self-reliance) may be healthy for change while others may be harmful (i.e., power over women) for change in a substance abuse population. Future interventions could target men and masculinity in order to help men progress to a greater stage of change in their treatment and ultimately lead to meaningful outcomes in terms of substance abuse behaviors.

REFERENCES

Baskin-Sommers, A., & Sommers, I. (2006). The co-occurrence of substance use and high-risk behaviors. *Journal of Adolescent Health, 38,* 609-611. doi:10.1016/j.jadohealth.2005.07.010

Brady, T. M., & Ashley, O. S. (Eds.). (2005). *Women in substance abuse treatment: Results from the Alcohol and Drug Services Study (ADSS)* (DHHS Publication No. SMA 04-3968, Analytic Series A-26). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies

Carey, K. B., Purnine, D. M., Maisto, S. A., & Carey, M. P. (1999). Assessing readiness to change substance abuse: A critical review of instruments. *Clinical Psychology: Science and Practice, 6,* 256-266. doi:10.1093/clipsy.6.3.245

Caviness, C. M., Hagerty, C. E., Anderson, B. J., de Dios, M. A., Hayaki, J., Herman, D., & Stein, M. D. (2013). Self-efficacy and motivation to quit marijuana use among young women. *The American Journal on Addictions, 22,* 373-380. doi:10.1111/j.1521-0391.2013.12030.x

Centers for Disease Control and Prevention (2016). *HIV and substance use in the United States.* Retrieved from: https://www.cdc.gov/hiv/risk/substanceuse.html

Center for Substance Abuse Treatment (2005). *Substance abuse treatment: Group therapy* (Report no. 05-3991). Rockville, MD: SAMHSA/CSAT Treatment Improvement Protocols.

Claus, R. E., Mannen, K., & Schicht, W. W. (1999). Treatment career snapshots: Profiles of first treatment and previous treatment clients. *Addictive Behaviors, 24*, 471-479. doi:10.1016/S0306-4603(98)00106-3

Cohen, E., Feinn, R., Arias, A., & Kranzler, H. R. (2007). Alcohol treatment utilization: Findings

from the National Epidemiologic Survey on Alcohol and Related Conditions. *Drug and Alcohol Dependence*, *86*, 214-221. doi:10.1016/j.drugalcdep.2006.06.008

Cox, W. M., Blount, J. P., Bair, J., & Hosier, S. G. (2000). Motivational predictors of readiness to change substance abuse. *Addiction Research, 8*, 121-128. doi:10.3109/16066350009004415

DiClemente, C. C., & Hughes, S. O. (1990). Stages of change profiles in outpatient alcoholism treatment. *Journal of Substance Abuse, 2,* 217-235. doi: 10.1016/S0899-3289(05)80057-4

DiClemente, C. C., Schlundt, D., & Gemmell, L. (2004). Readiness and stages of change in addiction treatment. *The American Journal on Addictions, 13,* 103-119. doi:10.1080=10550490490435777

Dutra, L., Stathopoulou, G., Basden, S. L., Leyro, T. M., Powers, M. B., & Otto, M. W. (2008). A meta-analytic review of psychosocial interventions for substance use disorders. *American Journal of Psychiatry*, *165*, 179-187. doi:10.1176/appi.ajp.2007.06111851

El-Bassel, N., Schilling, R. F., Ivanoff, A., Chen, D. R., Hanson, M., & Bidassie, B. (1998). Stages of change profiles among incarcerated drug-using women. *Addictive Behaviors*, *23*, 389-394. doi:10.1016/S0306-4603(97)00036-1

Fahey, J. (2004). *Male role issues among hospitalized alcohol abusers: Prediction of addiction severity, readiness to change, and intensity of drug-thinking style* (Unpublished doctoral dissertation). Temple University, Philadelphia, PA.

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39,* 175–191. Retrieved from https://link.springer.com/journal/13428

Field, A. (2013). *Discovering statistics using IBM SPSS statistics.* Thousand Oaks, CA: Sage.

Fillmore, K. M., Golding, J. M., Leino, E. V., Motoyoshi, M., Shoemaker, C., Terry, H., Ager, C. R., Ferrer, H. P. (1997). Patterns and trends in women's and men's drinking. In R.W. Wilsnack & S. C. Wilsnack (Eds.), *Gender and alcohol: Individual and social perspectives* (pp. 21-48). New Brunswick, NJ: Rutgers Center of Alcohol Studies Publication Division.

Galdas, P. M. (2009). Men, masculinity, and help-seeking behavior. In A. Broom (Ed.), *Men's health: Body, identity and social context* (pp. 63-82). Chichester, U. K.: Wiley-Blackwell.

Galdas, P. M., Cheater, F., & Marshall, P. (2005). Men and health help-seeking behavior: Literature review. *Journal of Advanced Nursing, 49*, 616-623. doi:10.1111/j.1365-2648.2004.03331.x

Gonzalez, J. M., Alegria, M., & Prihoda, T. J. (2005). How do attitudes toward mental health treatment vary by age, gender, and ethnicity/race in young adults? *Journal of Community Psychology*, *33*, 611-629. doi:10.1002/jcop.20071

Greenfield, S. F., Brooks, A. J., Gordon, S. M., Green, C. A., Kropp, F., McHugh, R. K., & Miele, G. M. (2007). Substance abuse treatment entry, retention, and outcome in women: A review of the literature. *Drug and Alcohol Dependence*, *86*, 1-21. doi:10.1016/j.drugalcdep.2006.05.012.

Heath, J., Lanoye, A., & Maisto, S. A. (2012). The role of alcohol and substance use in risky sexual behavior with older men who have sex with men: A review and critique of the current literature. *AIDS Behavior, 16,* 578-589. doi:10.1007/s10461-011-9921-2

Hsu, K., & Iwamoto, D. K. (2014). Testing for measurement invariance in the Conformity to Masculine Norms-46 across White and Asian American college men: Development and

validity of the CMNI-29. *Psychology of Men & Masculinity, 15*, 397-406. doi:10.1037/a0034548

Isenhart, C. (2001). Treating substance abuse in men. In G. R. Brooks (Ed.), *The new handbook of psychotherapy and counseling with men: A comprehensive guide to settings, problems, and treatment approaches* (pp. 246-262). San Francisco, CA: Jossey-Bass.

Iwamoto, D. K., Cheng, A., Lee, C. S., Takamatsu, S., & Gordon, D. (2011). "Man-ing" up and getting drunk: The role of masculine norms, alcohol intoxication and alcohol-related problems among college men. *Addictive Behaviors, 36,* 906-911. doi:10.1016/j.addbeh.2011.04.005

Kaya, A., Iwamoto, D. K., Brady, J., Clinton, L., & Grivel, M. (2018). The role of masculine norms and gender role conflict on prospective well-being among men. *Psychology of Men and Masculinity,* Advance online publication. doi: 10.1037/men0000155

Kiene, S. M., Barta, W. D., Tennen, H., & Armeli, S. (2009). Alcohol, helping young adults have unprotected sex with casual partners: Findings from a daily diary study of alcohol use and sexual behavior. *Journal of Adolescent Health, 44,* 73-80. doi:10.1016/j.jadohealth.2008.05.008

Lemle, R., & Mishkind, M. E. (1989). Alcohol and masculinity. *Journal of Substance Abuse Treatment, 6,* 213-222. doi:10.1016/0740-5472(89)90045-7

Mahalik, J. R., Locke, B. D., Ludlow, L. H., Diemer, M. A., Scott, R. P., Gottfried, M., & Freitas, G. (2003). Development of the Conformity to Masculine Norms Inventory. *Psychology of Men & Masculinity, 4,* 3-25. doi:10.1037/1524-9220.4.1.3

McConnaughy, E. A., DiClemente, C. C., Prochaska, J. O., & Velicer, W. F. (1989). Stages of change in psychotherapy: A follow-up report. *Psychotherapy: Theory, Research, Practice, Training*, *26*, 494- 503. doi:10.1037/h0085468

McConnaughy, E. A., Prochaska, J. O., & Velicer, W. V. (1983). Stages of change in psychotherapy: Measurement and sample profiles. *Psychotherapy: Theory, Research, and Practice, 20*, 368-375. doi:10.1037/h0090198

Miller, W. R., & Rollnick, S. (2002). *Motivational interviewing: Helping people change.* New York, NY: Guilford Press.

Miller, W. R., & Tonigan, J. S. (1996). Assessing drinkers' motivations for change: The Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES). *Psychology of Addictive Behaviors, 10,* 81–89. doi:10.1037/10248-014

Mohatt, D. F., Adams, S. J., Bradley, M. M., & Morris, C. D. (Eds.). (2006). *Mental health and rural America, 1994-2005: An overview and annotated bibliography* (3rd ed.). Rockville, MD: Health Resources and Services Administration, Office of Rural Health Policy.

Moore, T. M., Elkins, S. R., McNulty, J. K., Kivisto, A. J., & Handsel, V. A. (2011). Alcohol use and intimate partner violence perpetration among college students: Assessing the temporal association using electronic diary technology. *Psychology of Violence, 1*, 315-328. doi:10.1037/a0025077

Napper, L. E., Wood, M. M., Jaffe, A., Fisher, D. G., Reynolds, G. L., & Klahn, J. A. (2008). Convergent and divergent validity of three measures of stages of change. *Psychology of Addictive Behaviors, 22*, 362-371. doi:10.1037/0893-164X.22.3.362

Natarajan, A. (2010). *Motivational level and factors associated with stages of change: Mandated treatment for substance abuse under the criminal justice system* (Unpublished doctoral dissertation). Case Western Reserve University, Cleveland, OH.

National Center on Addiction and Substance Abuse at Columbia University (2012). *Addiction medicine: Closing the gap between science and practice.* New York, NY: Columbia University.

National Institute on Drug Abuse (2011). *Treatment statistics.* Retrieved May 31, 2017 from https://www.drugabuse.gov/publications/drugfacts/treatment-statistics#sources

Nolen- Hoeksema, S. (2004). Gender differences in risk factors and consequences for alcohol use and problems. *Clinical Psychology Review, 24,* 981-1010. doi:10.1016/j.cpr.2004.08.003

Norcross, J. C., Krebs, P. M., & Prochaska, J. O. (2011). Stages of change. *Journal of Clinical Psychology: In Session, 67*, 143-154. doi:10.1002/jclp.20758

O'Neil, J. M. (2015). *Men's gender role conflict: Psychological costs, consequences, and an agenda for change.* Washington, DC: American Psychological Association.

O'Neil, J. M. (2008). Summarizing 25 years of research on men's gender role conflict using the Gender Role Conflict Scale: New research paradigms and clinical implications. *The Counseling Psychologist, 36,* 358- 445. doi:10.1177/0011000008317057

O'Neil J. M., Helms, B. J., Gable, R. K., David, L., & Wrightsman, L. S. (1986). Gender-role conflict scale: College men's fear of femininity. *Sex Roles, 14*, 335-350. doi:10.1007/BF00287583

Parent, M. C. (2013). Handling item-level missing data: Simpler is just as good. *The Counseling Psychologist, 41,* 568-600. doi:10.1177/0011000012445176

Parent, M. C., & Moradi, B. (2009). Confirmatory factor analysis of the Conformity to Masculine Norms Inventory and development of the Conformity to Masculine Norms Inventory-46. *Psychology of Men & Masculinity, 10*, 175-189. doi:10.1037/a0015481

Parent, M. C., & Moradi, B. (2011). An abbreviated tool for assessing Conformity to Masculine Norms: Psychometric properties of the Conformity to Masculine Norms Inventory-46. *Psychology of Men and Masculinity, 12*, 339-353. doi:10.1037/a0021904

Peralta, R. L. (2007). College alcohol use and the embodiment of hegemonic masculinity among European American men. *Sex Roles, 56,* 741-756. doi:10.1007/s11199-007-9233-1

Pollini, R. A., O'Toole, T. P., Ford, D., & Bigelow, G. (2006). Does this patient really want treatment? Factors associated with baseline and evolving readiness for change among hospitalized substance using adults interested in treatment. *Addictive Behaviors, 31,* 1904-1918. doi:10.1016/j.addbeh.2006.01.003

Prochaska, J. O., & DiClemente, C. C. (1982). Transtheoretical therapy: Toward a more integrative model of change. *Psychotherapy: Theory, Research, and Practice, 19*, 276-288. doi:10.1037/h0088437

Prochaska, J.O., DiClemente, C.C., Velicer, W.F., & Rossi, J.S. (1992). Criticisms and concerns of the trans-theoretical model in light of recent research. *British Journal of Addiction, 87,* 825–828. doi:10.1111/j.1360-0443.1992.tb01973.x

Prochaska, J. O., Redding, C. A., & Evers, K. E. (2013). The transtheoretical model and stages of change. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.), *Health behavior and health education: Theory, research, and practice* (pp. 97-122). San Francisco, CA: Jossey-Bass.

Project MATCH Research Group (1997a). Matching alcoholism treatments to client heterogeneity: Project MATCH posttreatment drinking outcomes. *Journal of Studies on Alcohol, 58*, 7-29. doi:10.15288/jsa.1997.58.7

Project MATCH Research Group (1997b). Project MATCH a priori secondary hypotheses. *Addiction, 92*, 1671-1698. doi:10.1111/j.1360-0443.1997.tb02889.x

Rice, S. L., Hagler, K. J., & Tonigan, J. S. (2014). Longitudinal trajectories of readiness to change: Alcohol use and help-seeking behavior. *Journal of Studies on Alcohol and Drugs, 75*, 486-495. doi:10.15288/jsad.2014.75.486

Rochlen, A. B., Land, L. N., & Wong, Y. J. (2004). Male restrictive emotionality and evaluations of online versus face-to-face counseling. *Psychology of Men & Masculinity*, *5*, 190- 200. doi:0.1037/1524-9220.5.2.190

Scott-Sheldon, L. A. J., Carey, M. P., & Carey, M. B. (2010). Alcohol and risky sexual behavior among heavy drinking college students. *AIDS Behavior, 14,* 845-853. doi:10.1007/s10461-008-9426-9

Simpson, D. D. (2004). A conceptual framework for drug treatment process and outcomes. *Journal of Substance Abuse Treatment, 27,* 99-121. doi:10.1016/j.jsat.2004.06.001

Slutske, W. W. (2005). Alcohol use disorders among US college students and their noncollege-attending peers. *Archives of General Psychiatry, 62,* 321–327. doi:10.1001/archpsyc.62.3.321

Szymanski, D. M., Moffitt, L. B., & Carr, E. B. (2011). Sexual objectification of women: Advances to theory and research. *The Counseling Psychologist, 39*, 6-38. doi:10.1177/0011000010378402

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics*. Boston: Allyn and Bacon.

Turner, B., Turner, B., Deane, F. P., & Deane, F. P. (2016). Length of stay as a predictor of reliable change in psychological recovery and well-being following residential substance abuse treatment. *Therapeutic Communities: The International Journal of Therapeutic Communities*, *37*(3), 112-120. doi:10.1108/TC-09-2015-0022

van Wormer, K., & Davis, D. R. (2008). *Addiction treatment: A strengths perspective.* Belmont, CA: Thomson Higher Education.

Weston, R., & Gore, P. A. (2006). A brief guide to structural equation modeling. *The Counseling Psychologist, 34,* 719-751. doi:10.1177/0011000006286345

Williams, R. J., & Ricciardelli, L. A. (1999). Gender congruence in confirmatory and compensatory drinking. *The Journal of Psychology, 133*, 323-331. doi:10.1080/00223989909599745

Wisch, A. F., Mahalik, J. R., Hayes, J. A., & Nutt, E. A. (1995). The impact of gender role conflict and counseling technique on psychological help seeking in men. *Sex Roles*, *33*, 77-89. doi:10.1007/BF01547936

Wong, Y. J., Ho, M. H. R., Wang, S. Y., & Miller, I. S. K. (2017). Meta-analyses of the relationship between the conformity to masculine norms and mental health-related outcomes. *Journal of Counseling Psychology, 64*, 80-93. doi:10.1037/cou0000176

Yalom, I. D., & Leszcz, M. (2005). *The theory and practice of group psychotherapy.* New York, NY: Basic Books.

APPENDICES

Table 1.1 Means, standard deviations, and correlations for study variables.

Variables	**M**	**SD**	***Possible Range***	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
1. Previous Treatment	---	---	---	---	.02	.00	.21*	.08	.17*	.17*	-.02	.02	-.02	.23**
2. Winning	1.58	.61	0-3	---	---	.06	.18*	.22**	.12	.15	.05	.06	.13	.15
3. Emotional Control	1.43	.67	0-3	---	---	---	-.12	.07	.11	.13	.55**	.10	.34**	.04
4. Risk-Taking	1.43	.67	0-3	---	---	---	---	.40**	.26**	.33**	.08	.01	.10	-.03
5. Violence	1.55	.68	0-3	---	---	---	---	---	.22**	.31**	-.05	-.01	.20*	.02
6. Power Over Women	.60	.55	0-3	---	---	---	---	---	---	.34**	.03	.13	.42**	-.19*
7. Playboy	1.02	.75	0-3	---	---	---	---	---	---	---	.08	.08	.07	-.10
8. Self-reliance	1.45	.67	0-3	---	---	---	---	---	---	---	---	-.02	.13	.22*
9. Primacy of Work	1.31	.67	0-3	---	---	---	---	---	---	---	---	---	.16	-.10
10. Heterosexual Self Presentation	1.32	.80	0-3	---	---	---	---	---	---	---	---	---	---	-.06
11. Readiness for Change	10.86	1.84	-2 - 14	---	---	---	---	---	---	----	---	---	---	---

Note. *p <.05; ** p < .01

Table 1.2 Summary of regression model predicting readiness for change.

Predictor variable	*B*	*β*	t	R^2	ΔR^2	*F*	*df*
Previous treatment	1.11	.30	3.65**	.05	.05	7.36**	1, 135
Winning	.51	.17	2.07*	.21	.16	3.44**	9, 126
Emotional Control	-.31	-.11	-1.08				
Risk-Taking	-.31	-.11	-1.16				
Violence	.27	.10	1.07				
Power Over Women	-.70	-.21	-2.23*				
Playboy	-.26	-.10	-1.14				
Self-Reliance	.83	.30	3.05**				
Primacy of Work	-.17	-.06	-.76				
Heterosexual Self-Presentation	.04	.02	.19				

Note. *B, β* and *t* reflects values from the final regression equation; * p <.05; ** p < .01

VITA

Renee Mikorski was born in New Brunswick, NJ to Daniel and Susan Mikorski. She has one younger sibling, David, and a cat named Jefferson. She graduated from Montgomery High School in 2005 and moved to Boston, MA to attend Boston University. After graduating from BU in 2009 with degrees in Psychology and Biology, Renee pursued a Master of Science degree in Psychology at Drexel University in Philadelphia, PA with an interest in eating disorders and body image. She is currently enrolled at the University of Tennessee- Knoxville, working with Dr. Dawn Szymanski in pursuit of a Ph.D. in Counseling Psychology.